

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[AD-FRL-6114-6]

RIN 2060-AH66

National Emission Standards for Hazardous Air Pollutants:
Wood Furniture Manufacturing Operations

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed amendments to final rule

SUMMARY: This action proposes amendments to the national emission standards for hazardous air pollutants (NESHAP) promulgated in the Federal Register on December 7, 1995 for wood furniture manufacturing operations. This proposal offers amendments to the rule pursuant to three agreements reached in settlement of the following petitions for review: Chemical Manufacturers Association v. EPA, No. 96-1031 (D.C. Cir.); Halogenated Solvents Industry Alliance, Inc. v. EPA, No. 96-1036 (D.C. Cir.); and Society of the Plastics Industry, Inc., v. Browner, No. 96-1038 (D.C. Cir.). This proposal also offers clarifying amendments, as well as technical amendments to certain sections of the final rule.

DATES: Comments. Comments must be received on or before July 24, 1998, unless a hearing is requested by July 6, 1998. If a hearing is requested, written comments must be received by August 10, 1998.

Public Hearing. Anyone requesting a public hearing must contact the EPA no later than July 6, 1998. If a

hearing is held, it will take place on July 9, 1998, beginning at 10:00 a.m.

ADDRESSES: Comments. Interested parties may submit written comments (in duplicate, if possible) to: Air and Radiation Docket and Information Center (6102), Attention, Docket No. A-93-10, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460. Comments on the proposed changes to the NESHAP may also be submitted electronically by sending electronic mail (e-mail) to: a-and-r-docket@epamail.epa.gov.

Public Hearing. If a public hearing is held, it will be held at the EPA's Office of Administration Auditorium, Research Triangle Park, North Carolina. Persons interested in attending the hearing or wishing to present oral testimony should notify Mrs. Kim Teal, U.S. Environmental Protection Agency, Research Triangle Park, N.C. 27711, telephone (919) 541-5580.

FOR FURTHER INFORMATION CONTACT: For information concerning the standards and the proposed changes, contact Mr. Paul Almodóvar, Coatings and Consumer Products Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, NC 27711; telephone (919) 541-0283. For information regarding the applicability of this action to a particular entity, contact Mr. Robert Marshall, Manufacturing Branch, Office of

Compliance (2223A), U.S. EPA, 401 M Street, SW, Washington, DC 20460; telephone (202) 564-7021.

SUPPLEMENTARY INFORMATION:

Electronic Comment Submission

Electronic comments must be submitted as an ASCII file avoiding the use of special characters and any form of encryption. Comments also will be accepted on diskette in WordPerfect 5.1 or ASCII file format. All comments in electronic form must be identified by the docket number A-93-10. No confidential business information should be submitted through e-mail. Electronic comments may be filed on-line at many Federal Depository Libraries.

Regulated Entities

Entities potentially regulated by this action are owners or operators of facilities that are engaged, either in part or in whole, in wood furniture manufacturing operations and that are major sources as defined in 40 CFR part 63, subpart A, section 63.2. Regulated categories include:

Category	Examples of regulated entities
Industry	Facilities which are major sources of hazardous air pollutants (HAP) and manufacture wood furniture or wood furniture components.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities that the EPA is now aware potentially could be regulated by this action.

Other types of entities not listed in the table also could be regulated. To determine whether your facility [company, business, organization, etc.] is regulated by this action, you should carefully examine the applicability criteria in section 63.800 of the NESHAP for wood furniture manufacturing operations that was promulgated in the Federal Register on December 7, 1995 (60 FR 62930) and codified at 40 CFR 63 Subpart JJ. If you have questions regarding the applicability of this action to a particular entity, consult Mr. Robert Marshall at the address listed in the preceding "FOR FURTHER INFORMATION CONTACT" section.

The information presented below is organized as follows:

- I. Background
- II. Summary of Proposed Changes
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 - A. Docket
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 - C. Executive Order 12866
 - D. Regulatory Flexibility Act
 - E. Unfunded Mandates Reform Act
 - F. Executive Order 13045
 - G. Executive Order 12875
 - H. National Technology Transfer and Advancement Act
- I. Background

On December 7, 1995 (60 FR 62930), the EPA promulgated NESHAP for wood furniture manufacturing operations (Wood Furniture NESHAP). These standards were codified as subpart JJ in 40 CFR part 63. These standards established emission limits for, among other things, coating and gluing of wood furniture and wood furniture components. Three different parties, the Chemical Manufacturers Association (CMA), the Halogenated Solvents Industry Alliance, Inc. (HSIA), and the Society of the Plastics Industry, Inc. (SPI), petitioned for judicial review of the final rule under section 307(b) of the Clean Air Act (the Act).

The EPA executed settlement agreements with each of these petitioners on December 18, 1997. In accordance with section 113(g) of the Act, the EPA published notice of the petitions in the Federal Register on December 24, 1997 (62 FR 67360). The notice provided a 30-day opportunity for public comment. One comment, supporting the agreements, was submitted.

The settlement agreement between the EPA and the CMA requires the EPA to conduct notice and comment rulemaking proposing that certain glycol ethers be removed from the list of volatile hazardous air pollutants (VHAP) of potential concern in table 6 of the Wood Furniture NESHAP. The agreement also provides that the de minimis value in table 5 for 2-ethoxyethyl acetate be changed from 5.0 tons per year to 10.0 tons per year.

The settlement agreement between the EPA and the HSIA requires the EPA: (1) to conduct notice-and-comment rulemaking in accordance with section 307(d) of the Act proposing that perchloroethylene and trichloroethylene be deleted from the list of pollutants prohibited from use in cleaning and washoff solvents under § 63.803(e) of the regulations (table 4 of the Wood Furniture NESHAP); and (2) to give great weight to the recommendations of the Science Panel of the Joint Methylene Chloride Characterization Task Force regarding whether a reassessment of the cancer hazard for methylene chloride should be undertaken based on current scientific information. The settlement agreement also requires the EPA to conduct additional notice and comment rulemaking with respect to methylene chloride if methylene chloride is reassessed and certain findings are made as a result of that reassessment.

The settlement agreement between the EPA and the SPI requires the EPA to propose technical amendments to the Wood Furniture NESHAP that would remove the subheadings of "Nonthreshold Pollutants," "High-Concern Pollutants," and "Unrankable Pollutants" in table 6, and to remove footnote "a" to table 6 which relates to these hazard ranking classifications.

This action proposes changes to the Wood Furniture NESHAP to address the settlement agreements discussed above.

This action also proposes clarifying changes and corrections which were identified after promulgation of the rule.

II. Summary of Proposed Changes

In order to affect the settlement agreement between the EPA and the CMA, and between the EPA and the SPI, the EPA is proposing to revise table 6 of the Wood Furniture NESHAP.

Table 6 lists those VHAP that are thought to pose a high concern for chronic toxicity. The regulations require affected sources to track the usage levels of these chemicals as part of their formulation assessment plans. The EPA, as a result of the negotiated rulemaking process for the final rule, included in the table 6 list only those chemicals with a toxicity composite score of 20 or higher.

The original table 6 excepted three glycol ether compounds from the list of VHAP of potential concern because of the relatively low toxicity of these compounds. In its challenge of the final rule, the CMA claimed that additional glycol ethers should be excluded from table 6, and asked that the EPA review toxicity data for other specified glycol ether compounds. The settlement agreement listed 17 other glycol ethers which the parties agreed should not, at this time, be considered VHAP of potential concern under this rule because either the EPA lacked sufficient toxicity information on the compound or subsequent data demonstrated a low toxicity for the compound. Since signing the settlement agreement, the EPA has completed a preliminary

literature review of toxicity studies for all of the listed compounds to determine if any have evidence of relatively severe toxicity. As a result of this screening analysis, the EPA believes that the likely hazards posed by these compounds are probably well below the cutoff level for treating these compounds as VHAP of potential concern and for the purposes of this rule should not be listed in table 6.¹ Additional information on the EPA's toxicity review can be found in the docket listed in the preceding "ADDRESSES" section.

The original table 6 contained subheadings for "nonthreshold" pollutants, "high-concern" pollutants, and "unrankable" pollutants. These subheadings followed the hazard ranking classification scheme proposed in regulations to implement the offsetting provisions of section 112(g) of the Act. The EPA now believes, however, that these subheadings, and footnote "a" which relates to these subheadings, serve no substantive function in this rule and should be removed from table 6. The definition of "VHAP of potential concern" is proposed to be revised to reflect this change in table 6.

Section 63.803(1)(6) is also being proposed to be revised to eliminate the reference to the 112(g)

¹ This review was conducted solely for this rule to confirm the reasonableness of the proposed changes based on the relative toxicity of these compounds. The EPA has conducted no peer review of these toxicity findings and has not developed a consensus position regarding the actual toxicity of these compounds.

regulations. The formulation assessment plan provision in § 63.803(1)(6) requires that if, after November 1998, an affected source uses any VHAP of potential concern listed in table 6, it must keep track of the annual usage of that chemical and report to the permitting authority if the usage exceeds the relevant de minimis value for that chemical. Section 63.803(1)(6) currently references section 112(g) regulations to determine the relevant de minimis values. This cross-reference is not necessary because table 6 is proposed to be revised to include the de minimis value for each chemical. The de minimis values provided in table 6 are not changed from the current values extrapolated from the proposed section 112(g) regulations.

In order to implement the settlement agreement between the EPA and the CMA, the EPA is also proposing to revise table 5 to change the de minimis level for 2-ethoxyethyl acetate from 5.0 to 10.0 tons per year. The EPA has concluded that the toxicity for 2-ethoxyethyl acetate is relatively low and in the absence of a more quantitative assessment (i.e., an inhalation reference concentration) for this chemical, the EPA's hazard ranking guidelines provide a default de minimis value of 10.0 tons per year. The proposed change of the 2-ethoxyethyl acetate de minimis value is thus consistent with the EPA's methodology.

In order to implement the settlement agreement between the EPA and the HSIA, the EPA is proposing to revise table 4 of the Wood Furniture NESHAP by removing trichloroethylene

and perchloroethylene from the list of prohibited cleaning and washoff solvents. The EPA intended to include in table 4 those pollutants classified under the EPA's hazard ranking methodology as Group A (known human carcinogen) or Group B (probable human carcinogen). The EPA currently considers both perchloroethylene and trichloroethylene as intermediately classified between a probable and possible human carcinogen(Group B/C). The EPA is in the process of revising its cancer risk assessment guidelines and is currently reassessing these pollutants. Since a definitive assessment of the carcinogenicity of these two chemicals has not been finalized by the EPA, and given the current carcinogenicity classifications of these chemicals, the EPA is proposing to remove them from table 4. Note, however, that this proposed change in Table 4 does not imply any change in the EPA's current scientific evaluation of these pollutants, nor does it carry any weight with respect to policies adopted toward these pollutants in other regulatory contexts.

The EPA is also taking this opportunity to propose additional technical and clarifying corrections to the final rule. The EPA is proposing to remove caprolactam from the list of VHAP in table 2 of the rule because this chemical has been delisted from the HAP list in section 112(b)(1) of the Act (61 FR 30816).

The EPA is proposing to revise the definition of "organic solvent" to reflect the EPA's intent in the final rule to regulate only those organic solvents considered HAP. Since the promulgation of the NESHAP there has been some confusion on what organic solvents are regulated by the rule. The work practice standards in § 63.803(d) of the NESHAP include requirements for each owner or operator of a wood furniture manufacturing facility to develop an organic solvent accounting system. In addition, § 63.803(f) requires that an affected source use no more than 1.0 gallon of organic solvent per booth to prepare the surface of the booth prior to applying the booth coating. The current rule defines organic solvent as "a volatile organic liquid that is used for dissolving or dispersing constituents in a coating or contact adhesive, adjusting the viscosity of a coating or contact adhesive, or cleaning equipment. When used in a coating or contact adhesive, the organic solvent evaporates during drying and does not become a part of the dried film." The definition in the final rule should be limited to those organic solvents which are HAP. Therefore, the EPA is proposing to add the term "hazardous air pollutant" to the definition of organic solvent (e.g., organic HAP solvent). Elsewhere in the text of the rule, the EPA is proposing to replace the term "organic solvent" with the term "organic HAP solvent."

III. Administrative Requirements

A. Docket

Docket A-93-10 is an organized and complete file of all of the information submitted to, or otherwise considered by, the EPA in the development of this rulemaking. The docket is a dynamic file, since material is added throughout the rulemaking development. The docketing system is intended to allow members of the public to readily identify and locate documents to enable them to participate effectively in the rulemaking process. The contents of the docket serve as the record for purposes of judicial review (except for CAA interagency review materials) (§307(d)(7)(A) of the Act, 42 U.S.C. §7607(d)(7)(A)).

B. Paperwork Reduction Act

There are no additional information collection requirements contained in this proposal. Therefore, approval under the provisions of the Paperwork Reduction Act, 44 U.S.C. 3501, et seq., is not required.

C. Executive Order 12866

Under Executive Order 12866, the EPA is required to determine whether a regulation is "significant," and therefore, subject to Office of Management and Budget (OMB) review and the requirements of this Executive Order to prepare a regulatory impact analysis. The Executive Order defines "significant regulatory action" as one that is likely to result in a rule that may (1) have an annual effect on the economy of \$100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment,

public health or safety, or State, local, or Tribal governments or communities; (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency; (3) materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

This action is not a "significant regulatory action" within the meaning of the Executive Order. The proposed rule, if promulgated, is expected to reduce the regulatory burden on facilities by relaxing requirements related to specified chemical compounds and by increasing one of the de minimis levels triggering regulatory action. The EPA has concluded that these changes will not significantly impact the environment or public health or safety.

D. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to conduct a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements unless the agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small not-for-profit enterprises, and small governmental jurisdictions. This proposed rule would not have a significant impact on a substantial number of small entities because the proposed amendments impose no new

requirements on regulated entities. The proposed changes should actually ease the compliance burden of the Wood Furniture NESHAP. Therefore, I certify that this action will not have a significant economic impact on a substantial number of small entities.

E. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Pub. L. 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows the EPA to adopt an alternative other than the least costly, most cost-effective, or least burdensome alternative if the Administrator publishes with

the final rule an explanation why that alternative was not adopted. Before the EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

The EPA has determined that this proposed rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in aggregate, or for the private sector in any one year. Nor does the rule significantly or uniquely impact small governments, because it contains no requirements that apply to such governments and imposes no obligations upon them. Thus, the requirements of the UMRA do not apply to this rule.

The economic impact analysis performed for the original rule showed that the economic impacts from implementation of the promulgated standards would not be "significant" as defined in Executive Order 12866. No changes are being made

in these amendments that would increase the economic impacts.

F. Executive Order 13045

Executive Order 13045 applies to any rule that (1) has been determined to be "economically significant" as defined under Executive Order 12866, and (2) addresses an environmental health or safety risk that has a disproportionate effect on children. If the regulatory action meets both criteria, the Agency must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

This proposed rule is not subject to Executive Order 13045, entitled "Protection of Children from Environmental Health Risks and Safety Risks (62 FR 19885, April 23, 1997), because it is not an economically significant regulatory action as defined by Executive Order 12866, and it does not involve decisions on environmental health risks or safety risks that would have a disproportionate effect on children.

G. Executive Order 12875

Executive Order 12875 requires that, to the extent feasible and permitted by law, no Federal agency shall promulgate any regulation that is not required by statute and that creates a mandate upon a State, local, or tribal

government, unless funds necessary to pay the direct costs incurred by the State, local, or tribal government in complying with the mandate are provided by the Federal government. The EPA has determined that the requirements of Executive Order 12875 do not apply to today's rulemaking, since no mandate is created by this action.

H. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Pub. L. No. 104-113, § 12(d) (15 U.S.C. 272 note) directs the EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs the EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards. This proposed rulemaking does not involve technical standards. Therefore, the EPA is not considering the use of any voluntary consensus standards.

List of Subjects in 40 CFR Part 63

Environmental protection, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements, Wood furniture manufacturing.

Dated: June 18, 1998.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is proposed to be amended as follows:

Part 63--[AMENDED]

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

Subpart JJ--National Emissions Standards for Wood Furniture Manufacturing Operations

2. Section 63.801 is proposed to be amended by revising in alphabetical order the definitions for "Cleaning operations", "Disposed offsite", "Equipment leak", "Organic solvent", "Recycled onsite", "Strippable spray booth material", "VHAP of potential concern", and "Washoff operations" and by removing the definition of "Organic solvents", and adding a definition of "Organic HAP solvent" to read as follows:

§ 63.801 Definitions.

Cleaning operations means operations in which organic HAP solvent is used to remove coating materials or adhesives from equipment used in wood furniture manufacturing operations.

Disposed offsite means sending used organic HAP solvent or coatings outside of the facility boundaries for disposal.

Equipment leak means emissions of VHAP from pumps, valves, flanges, or other equipment used to transfer or apply coatings, adhesives, or organic HAP solvents.

Organic HAP solvent means a HAP that is volatile organic liquid that is used for dissolving or dispersing constituents in a coating or contact adhesive, adjusting the viscosity of a coating or contact adhesive, or cleaning equipment. When used in a coating or contact adhesive, the organic HAP solvent evaporates during drying and does not become a part of the dried film.

Recycled onsite means the reuse of an organic HAP solvent in a process other than cleaning or washoff.

Strippable spray booth material means a coating that:

- (1) Is applied to a spray booth wall to provide a protective film to receive overspray during finishing operations;
- (2) That is subsequently peeled off and disposed; and
- (3) By achieving (1) and (2) of this definition reduces or eliminates the need to use organic HAP solvents to clean spray booth walls.

VHAP of potential concern means any VHAP from the list in table 6 of this subpart.

Washoff operations means those operations in which organic HAP solvent is used to remove coating from wood furniture or a wood furniture component.

3. Section 63.803 is proposed to be amended by revising paragraphs (c)(1), (d), (f), (i), (j), and (l)(6) to read as follows:

§ 63.803 Work practice standards.

(c) ***

(1) A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents;

(d) Cleaning and washoff solvent accounting system.

Each owner or operator of an affected source shall develop an organic HAP solvent accounting form to record:

(1) The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in § 63.801 of this subpart;

(2) The number of pieces washed off, and the reason for the washoff; and

(3) The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite.

(f) Spray booth cleaning. Each owner or operator of an affected source shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished (that is, the spray booth coating or other protective material used to cover the booth is being replaced), the affected source shall use no more than 1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating.

(i) Line cleaning. Each owner or operator of an affected source shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container.

(j) Gun cleaning. Each owner or operator of an affected source shall collect all organic HAP solvent used to clean spray guns into a normally closed container.

(1) * * *

(6) If after November 1998, an affected source uses a VHAP of potential concern listed in table 6 of this subpart for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level provided in that same table for that chemical. The affected source shall track the annual usage of each VHAP of potential concern identified in this paragraph that is present in amounts subject to material safety data sheet reporting as required by the Occupational Safety and Health Administration. If usage of the VHAP of potential concern exceeds the de minimis level listed in table 6 of this subpart for that chemical, then the affected source shall provide an explanation to the permitting authority that documents the reason for the exceedance of the de minimis level. If the explanation is not one of those listed in paragraphs (1)(4)(i) through (1)(4)(iv) of this section, the affected source shall follow the procedures in paragraph (1)(5) of this section.

4. Table 2 of subpart JJ is proposed to be revised to read as follows:

TABLE 2. LIST OF VOLATILE HAZARDOUS AIR POLLUTANTS

Chemical name	CAS No.
Acetaldehyde	75070
Acetamide	60355
Acetonitrile	75058
Acetophenone	98862
2-Acetylaminofluorine	53963

Chemical name	CAS No.
Acrolein	107028
Acrylamide	79061
Acrylic acid	79107
Acrylonitrile	107131
Allyl chloride	107051
4-Aminobiphenyl	92671
Aniline	62533
o-Anisidine	90040
Benzene	71432
Benzidine	92875
Benzotrichloride	98077
Benzyl chloride	100447
Biphenyl	92524
Bis(2-ethylhexyl)phthalate (DEHP)	117817
Bis(chloromethyl)ether	542881
Bromoform	75252
1,3-Butadiene	106990
Carbon disulfide	75150
Carbon tetrachloride	56235
Carbonyl sulfide	463581
Catechol	120809
Chloroacetic acid	79118
2-Chloroacetophenone	532274
Chlorobenzene	108907
Chloroform	67663
Chloromethyl methyl ether	107302
Chloroprene	126998
Cresols (isomers and mixture)	1319773
o-Cresol	95487
m-Cresol	108394
p-Cresol	106445
Cumene	98828
2,4-D (2,4-Dichlorophenoxyacetic acid, including salts and esters)	94757
DDE (1,1-Dichloro-2,2-bis(p-chlorophenyl)ethylene)	72559
Diazomethane	334883
Dibenzofuran	132649
1,2-Dibromo-3-chloropropane	96128

Chemical name	CAS No.
Dibutylphthalate	84742
1,4-Dichlorobenzene	106467
3,3'-Dichlorobenzidine	91941
Dichloroethyl ether (Bis(2-chloroethyl)ether)	111444
1,3-Dichloropropene	542756
Diethanolamine	111422
N,N-Dimethylaniline	121697
Diethyl sulfate	64675
3,3'-Dimethoxybenzidine	119904
4-Dimethylaminoazobenzene	60117
3,3'-Dimethylbenzidine	119937
Dimethylcarbamoyl chloride	79447
N,N-Dimethylformamide	68122
1,1-Dimethylhydrazine	57147
Dimethyl phthalate	131113
Dimethyl sulfate	77781
4,6-Dinitro-o-cresol, and salts	534521
2,4-Dinitrophenol	51285
2,4-Dinitrotoluene	121142
1,4-Dioxane (1,4-Diethyleneoxide)	123911
1,2-Diphenylhydrazine	122667
Epichlorohydrin (1-Chloro-2,3-epoxypropane)	106898
1,2-Epoxybutane	106887
Ethyl acrylate	140885
Ethylbenzene	100414
Ethyl carbamate (Urethane)	51796
Ethyl chloride (Chloroethane)	75003
Ethylene dibromide (Dibromoethane)	106934
Ethylene dichloride (1,2-Dichloroethane)	107062
Ethylene glycol	107211
Ethylene oxide	75218
Ethylenethiourea	96457
Ethylidene dichloride (1,1-Dichloroethane)	75343
Formaldehyde	50000
Glycol ethers ^a	-
Hexachlorobenzene	118741
Hexachloro-1,3-butadiene	87683
Hexachloroethane	67721

Chemical name	CAS No.
Hexamethylene-1,6-diisocyanate	822060
Hexamethylphosphoramide	680319
Hexane	110543
Hydrazine	302012
Hydroquinone	123319
Isophorone	78591
Maleic anhydride	108316
Methanol	67561
Methyl bromide (Bromomethane)	74839
Methyl chloride (Chloromethane)	74873
Methyl chloroform (1,1,1-Trichloroethane)	71556
Methyl ethyl ketone (2-Butanone)	78933
Methylhydrazine	60344
Methyl iodide (Iodomethane)	74884
Methyl isobutyl ketone (Hexone)	108101
Methyl isocyanate	624839
Methyl methacrylate	80626
Methyl tert-butyl ether	1634044
4,4'-Methylenebis(2-chloroaniline)	101144
Methylene chloride (Dichloromethane)	75092
4,4'-Methylenediphenyl diisocyanate (MDI)	101688
4,4'-Methylenedianiline	101779
Naphthalene	91203
Nitrobenzene	98953
4-Nitrobiphenyl	92933
4-Nitrophenol	100027
2-Nitropropane	79469
N-Nitroso-N-methylurea	684935
N-Nitrosodimethylamine	62759
N-Nitrosomorpholine	59892
Phenol	108952
p-Phenylenediamine	106503
Phosgene	75445
Phthalic anhydride	85449
Polychlorinated biphenyls (Aroclors)	1336363
Polycyclic Organic Matter ^b	-
1,3-Propane sultone	1120714
beta-Propiolactone	57578

Chemical name	CAS No.
Propionaldehyde	123386
Propoxur (Baygon)	114261
Propylene dichloride (1,2-Dichloropropane)	78875
Propylene oxide	75569
1,2-Propylenimine (2-Methyl aziridine)	75558
Quinone	106514
Styrene	100425
Styrene oxide	96093
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746016
1,1,2,2-Tetrachloroethane	79345
Tetrachloroethylene (Perchloroethylene)	127184
Toluene	108883
2,4-Toluenediamine	95807
Toluene-2,4-diisocyanate	584849
o-Toluidine	95534
1,2,4-Trichlorobenzene	120821
1,1,2-Trichloroethane	79005
Trichloroethylene	79016
2,4,5-Trichlorophenol	95954
2,4,6-Trichlorophenol	88062
Triethylamine	121448
Trifluralin	1582098
2,2,4-Trimethylpentane	540841
Vinyl acetate	108054
Vinyl bromide	593602
Vinyl chloride	75014
Vinylidene chloride (1,1-Dichloroethylene)	75354
Xylenes (isomers and mixture)	1330207
o-Xylene	95476
m-Xylene	108383
p-Xylene	106423

^aIncludes mono- and di-ethers of ethylene glycol, diethylene glycols and triethylene glycol; $R-(OCH_2CH_2)_nRR-OR'$ where:
 $n = 1, 2, \text{ or } 3,$
 $R = \text{alkyl or aryl groups}$
 $R' = R, H, \text{ or groups which, when removed, yield}$
glycol ethers with the structure: $R-(OCH_2CH_2)_n - OH.$
Polymers are excluded from the glycol category.

^bIncludes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100°C.

5. Table 4--Pollutants excluded from use in cleaning and washoff solvents is proposed to be revised to read as follows:

TABLE 4. POLLUTANTS EXCLUDED FROM USE IN CLEANING AND WASHOFF SOLVENTS

Chemical Name	CAS No.
4-Aminobiphenyl	92671
Styrene oxide	96093
Diethyl sulfate	64675
N-Nitrosomorpholine	59892
Dimethyl formamide	68122
Hexamethylphosphoramide	680319
Acetamide	60355
4,4'-Methylenedianiline	101779
o-Anisidine	90040
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746016
Beryllium salts	-
Benzidine	92875
N-Nitroso-N-methylurea	684935
Bis(chloromethyl)ether	542881
Dimethyl carbamoyl chloride	79447
Chromium compounds (hexavalent)	-
1,2-Propylenimine (2-Methyl aziridine)	75558
Arsenic and inorganic arsenic compounds	99999904
Hydrazine	302012
1,1-Dimethyl hydrazine	57147
Beryllium compounds	7440417
1,2-Dibromo-3-chloropropane	96128
N-Nitrosodimethylamine	62759
Cadmium compounds	-
Benzo (a) pyrene	50328
Polychlorinated biphenyls (Aroclors)	1336363

Chemical Name	CAS No.
Heptachlor	76448
3,3'-Dimethyl benzidine	119937
Nickel subsulfide	12035722
Acrylamide	79061
Hexachlorobenzene	118741
Chlordane	57749
1,3-Propane sultone	1120714
1,3-Butadiene	106990
Nickel refinery dust	-
2-Acetylaminoflourine	53963
3,3'-Dichlorobenzidine	53963
Lindane (hexachlorcyclohexane, gamma)	58899
2,4-Toluene diamine	95807
Dichloroethyl ether (Bis(2-chloroethyl)ether)	111444
1,2 - Diphenylhydrazine	122667
Toxaphene (chlorinated camphene)	8001352
2,4-Dinitrotoluene	121142
3,3'-Dimethoxybenzidine	119904
Formaldehyde	50000
4,4'-Methylene bis(2-chloroaniline)	101144
Acrylonitrile	107131
Ethylene dibromide(1,2-Dibromoethane)	106934
DDE (1,1-p-chlorophenyl 1-2 dichloroethylene)	72559
Chlorobenzilate	510156
Dichlorvos	62737
Vinyl chloride	75014
Coke Oven Emissions	-
Ethylene oxide	75218
Ethylene thiourea	96457
Vinyl bromide (bromoethene)	593602
Selenium sulfide (mono and di)	7488564
Chloroform	67663
Pentachlorophenol	87865
Ethyl carbamate (Urethane)	51796
Ethylene dichloride (1,2-Dichloroethane)	107062

Chemical Name	CAS No.
Propylene dichloride (1,2-Dichloropropane)	78875
Carbon tetrachloride	56235
Benzene	71432
Methyl hydrazine	60344
Ethyl acrylate	140885
Propylene oxide	75569
Aniline	62533
1,4-Dichlorobenzene(p)	106467
2,4,6-Trichlorophenol	88062
Bis(2-ethylhexyl)phthalate (DEHP)	117817
o-Toluidine	95534
Propoxur	114261
1,4-Dioxane (1,4-Diethyleneoxide)	123911
Acetaldehyde	75070
Bromoform	75252
Captan	133062
Epichlorohydrin	106898
Methylene chloride (Dichloromethane)	75092
Dibenz (ah) anthracene	53703
Chrysene	218019
Dimethyl aminoazobenzene	60117
Benzo (a) anthracene	56553
Benzo (b) fluoranthene	205992
Antimony trioxide	1309644
2-Nitropropane	79469
1,3-Dichloropropene	542756
7, 12-Dimethylbenz(a)anthracene	57976
Benz(c)acridine	225514
Indeno(1,2,3-cd)pyrene	193395
1,2:7,8-Dibenzopyrene	189559

6. Table 5--List of VHAP of Potential Concern Identified by Industry is proposed to be revised to read as follows:

TABLE 5. LIST OF VHAP OF POTENTIAL CONCERN IDENTIFIED BY INDUSTRY

CAS No.	Chemical name	EPA de minimis, tons/yr
68122	Dimethyl formamide	1.0
50000	Formaldehyde	0.2
75092	Methylene chloride	4.0
79469	2-Nitropropane	1.0
78591	Isophorone	0.7
1000425	Styrene monomer	1.0
108952	Phenol	0.1
111422	Dimethanolamine	5.0
109864	2-Methoxyethanol	10.0
111159	2-Ethoxyethyl acetate	10.0

7. Table 6--VHAP of potential concern is proposed to be revised to read as follow:

TABLE 6. VHAP OF POTENTIAL CONCERN

CAS No.	Chemical name	EPA de minimis, tons/yr*
92671	4-Aminobiphenyl	1.0
96093	Styrene oxide	1.0
64675	Diethyl sulfate	1.0
59892	N-Nitrosomorpholine	1.0
68122	Dimethyl formamide	1.0
680319	Hexamethylphosphoramide	0.01
60355	Acetamide	1.0
101779	4,4'-Methylenedianiline	1.0
90040	o-Anisidine	1.0
1746016	2,3,7,8-Tetrachlorodibenzo-p-dioxin	0.00000006
92875	Benzidine	0.00003
684935	N-Nitroso-N-methylurea	0.00002
542881	Bis(chloromethyl)ether	0.00003
79447	Dimethyl carbamoyl chloride	0.002
75558	1,2-Propylenimine (2-Methyl aziridine)	0.0003

CAS No.	Chemical name	EPA de minimis, tons/yr*
57147	1,1-Dimethyl hydrazine	0.0008
96128	1,2-Dibromo-3-chloropropane	0.001
62759	N-Nitrosodimethylamine	0.0001
50328	Benzo (a) pyrene	0.001
1336363	Polychlorinated biphenyls (Aroclors)	0.0009
76448	Heptachlor	0.002
119937	3,3'-Dimethyl benzidine	0.001
79061	Acrylamide	0.002
118741	Hexachlorobenzene	0.004
57749	Chlordane	0.005
1120714	1,3-Propane sultone	0.003
106990	1,3-Butadiene	0.007
53963	2-Acetylaminoflourine	0.0005
91941	3,3'-Dichlorobenzidine	0.02
58899	Lindane (hexachlorocyclohexane, gamma)	0.005
95807	2,4-Toluene diamine	0.002
111444	Dichloroethyl ether (Bis(2-chloroethyl)ether)	0.006
122667	1,2 - Diphenylhydrazine	0.009
8001352	Toxaphene (chlorinated camphene)	0.006
121142	2,4-Dinitrotoluene	0.002
119904	3,3'-Dimethoxybenzidine	0.01
50000	Formaldehyde	0.2
101144	4,4'-Methylene bis(2-chloroaniline)	0.02
107131	Acrylonitrile	0.03
106934	Ethylene dibromide(1,2-Dibromoethane)	0.01
72559	DDE (1,1-p-chlorophenyl 1-2 dichloroethylene)	0.01
510156	Chlorobenzilate	0.04
62737	Dichlorvos	0.02
75014	Vinyl chloride	0.02

CAS No.	Chemical name	EPA de minimis, tons/yr*
75218	Ethylene oxide	0.09
96457	Ethylene thiourea	0.06
593602	Vinyl bromide (bromoethene)	0.06
67663	Chloroform	0.09
87865	Pentachlorophenol	0.07
51796	Ethyl carbamate (Urethane)	0.08
107062	Ethylene dichloride (1,2-Dichloroethane)	0.08
78875	Propylene dichloride (1,2-Dichloropropane)	0.1
56235	Carbon tetrachloride	0.1
71432	Benzene	0.2
140885	Ethyl acrylate	0.1
75569	Propylene oxide	0.5
62533	Aniline	0.1
106467	1,4-Dichlorobenzene(p)	0.3
88062	2,4,6-Trichlorophenol	0.6
117817	Bis(2-ethylhexyl)phthalate (DEHP)	0.5
95534	o-Toluidine	0.4
114261	Propoxur	2.0
79016	Trichloroethylene	1.0
123911	1,4-Dioxane (1,4-Diethyleneoxide)	0.6
75070	Acetaldehyde	0.9
75252	Bromoform	2.0
133062	Captan	2.0
106898	Epichlorohydrin	2.0
75092	Methylene chloride (Dichloromethane)	4.0
127184	Tetrachloroethylene (Perchloroethylene)	4.0
53703	Dibenz (ah) anthracene	0.01
218019	Chrysene	0.01
60117	Dimethyl aminoazobenzene	1.0
56553	Benzo (a) anthracene	0.01

CAS No.	Chemical name	EPA de minimis, tons/yr*
205992	Benzo (b) fluoranthene	0.01
79469	2-Nitropropane	1.0
542756	1,3-Dichloropropene	1.0
57976	7,12-Dimethylbenz(a)anthracene	0.01
225514	Benz(c)acridine	0.01
193395	Indeno(1,2,3-cd)pyrene	0.01
189559	1,2:7,8-Dibenzopyrene	0.01
79345	1,1,2,2-Tetrachloroethane	0.03
91225	Quinoline	0.0006
75354	Vinylidene chloride (1,1-Dichloroethylene)	0.04
87683	Hexachlorobutadiene	0.09
82688	Pentachloronitrobenzene (Quintobenzene)	0.03
78591	Isophorone	0.7
79005	1,1,2-Trichloroethane	0.1
74873	Methyl chloride (Chloromethane)	1.0
67721	Hexachloroethane	0.5
1582098	Trifluralin	0.9
1319773	Cresols/Cresylic acid (isomers and mixture)	1.0
108394	m-Cresol	1.0
75343	Ethylidene dichloride (1,1-Dichloroethane)	1.0
95487	o-Cresol	1.0
106445	p-Cresol	1.0
74884	Methyl iodide (Iodomethane)	1.0
100425	Styrene	1.0
107051	Allyl chloride	1.0
334883	Diazomethane	1.0
95954	2,4,5 - Trichlorophenol	1.0
133904	Chloramben	1.0
106887	1,2 - Epoxybutane	1.0
108054	Vinyl acetate	1.0

CAS No.	Chemical name	EPA de minimis, tons/yr*
126998	Chloroprene	1.0
123319	Hydroquinone	1.0
92933	4-Nitrobiphenyl	1.0
56382	Parathion	0.1
13463393	Nickel Carbonyl	0.1
60344	Methyl hydrazine	0.006
151564	Ethylene imine	0.0003
77781	Dimethyl sulfate	0.1
107302	Chloromethyl methyl ether	0.1
57578	beta-Propiolactone	0.1
100447	Benzyl chloride	0.04
98077	Benzotrichloride	0.0006
107028	Acrolein	0.04
584849	2,4 - Toluene diisocyanate	0.1
75741	Tetramethyl lead	0.01
78002	Tetraethyl lead	0.01
12108133	Methylcyclopentadienyl manganese	0.1
624839	Methyl isocyanate	0.1
77474	Hexachlorocyclopentadiene	0.1
62207765	Fluomine	0.1
10210681	Cobalt carbonyl	0.1
79118	Chloroacetic acid	0.1
534521	4,6-Dinitro-o-cresol, and salts	0.1
101688	Methylene diphenyl diisocyanate	0.1
108952	Phenol	0.1
62384	Mercury, (acetato-o) phenyl	0.01
98862	Acetophenone	1.0
108316	Maleic anhydride	1.0
532274	2-Chloroacetophenone	0.06
51285	2,4-Dinitrophenol	1.0
109864	2-Methoxy ethanol	10.0
98953	Nitrobenzene	1.0
74839	Methyl bromide (Bromomethane)	10.0

CAS No.	Chemical name	EPA de minimis, tons/yr [*]
75150	Carbon disulfide	1.0
121697	N,N-Dimethylaniline	1.0
106514	Quinone	5.0
123386	Propionaldehyde	5.0
120809	Catechol	5.0
85449	Phthalic anhydride	5.0
463581	Carbonyl sulfide	5.0
132649	Dibenzofurans	5.0
100027	4-Nitrophenol	5.0
540841	2,2,4-Trimethylpentane	5.0
111422	Diethanolamine	5.0
822060	Hexamethylene-1,6-diisocyanate	5.0
-	Glycol ethers ^a	5.0
-	Polycyclic organic matter ^b	0.01

*These values are based on the de minimis levels provided in the proposed rulemaking pursuant to section 112(g) of the Act using a 70-year lifetime exposure duration for all VHAP. Default assumptions and the de minimis values based on inhalation reference doses (RfC) are not changed by this adjustment.

^aExcept for ethylene glycol butyl ether, ethylene glycol ethyl ether (2-ethoxy ethanol), ethylene glycol hexyl ether, ethylene glycol methyl ether (2-methoxyethanol), ethylene glycol phenyl ether, ethylene glycol propyl ether, ethylene glycol mono-2-ethylhexyl ether, diethylene glycol butyl ether, diethylene glycol ethyl ether, diethylene glycol methyl ether, diethylene glycol hexyl ether, diethylene glycol phenyl ether, diethylene glycol propyl ether, triethylene glycol butyl ether, triethylene glycol ethyl ether, triethylene glycol methyl ether, triethylene glycol propyl ether, ethylene glycol butyl ether acetate, ethylene glycol ethyl ether acetate, and diethylene glycol ethyl ether acetate.

^bExcept for benzo(b)fluoranthene, benzo(a)anthracene, benzo(a)pyrene, 7,12-dimethylbenz(a)anthracene, benz(c)acridine, chrysene, dibenz(ah)anthracene, 1,2:7,8-dibenzopyrene, indeno(1,2,3-cd)pyrene, but including dioxins and furans.